Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PATRICK TOUZEAU, THIERRY P.F. VAULAY
and GABRIEL C.M FERNANDEZ

Appeal No. 2001-0656
Application No. 08/976,645

ON BRIEF

Before KRASS, FLEMING and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-7, all of the pending claims.

The invention pertains to a telecommunication system. In particular, in a point to multipoint channel extension protocol and system, a point to point radio link between a primary station

and a secondary station is extended. A handset is informed of an extension and the handset switches off its transmitter, at which time extension messages are transmitted to all handsets.

Representative independent claim 1 is reproduced as follows:

1. A telecommunications system comprising at least one primary radio station and a plurality of secondary radio stations, wherein at least one secondary radio station is matched to a primary radio station, each station has a transmitter and a receiver, characterised in that the primary station is arranged for setting up a point to point full duplex communication link to a matched secondary station or vice versa, and that the primary station is arranged for issuing a extension request to the matched secondary station and to further matched secondary stations after the setting up of the point to point communication link, and the secondary station to which the communication link has been set up switches off its transmitter, and the matched secondary station and the further matched secondary stations have their receivers ready for receiving a broadcast message from the primary station.

The examiner relies on the following references:

Yamashita et al. (Yamashita)	5,644,621	Jul. 01, 1997 (filed Jan. 10, 1995)
Kapanen	5,835,889	Nov. 10, 1998 (filed Jun. 28, 1996)

Claims 1-7 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites Yamashita with regard to claims 3 and 4, adding Kapanen with regard to claims 1, 2, 6 and 7.

Reference is made to the brief and answer for the respective positions of appellants and the examiner.

OPINION

With regard to independent claims 1, 6 and 7, the examiner applies Yamashita as showing the claimed subject matter but for the secondary station switching OFF its transmitter and that the matched secondary stations have their receivers "ready," as defined by appellants.

The examiner turns to Kapanen for a teaching, within a wireless communication system, of a radiotelephone that switches OFF its transmitter when it has nothing to transmit, for the purpose of reducing power consumption and improving radio frequencies utilization. Therefore, the examiner concludes that it would have been obvious to switch OFF the transmitter of the secondary station when it has nothing to transmit, such as after having established communication with the primary station, for the purpose of saving power and to improve radio frequencies utilization.

Moreover, the examiner concludes that "it is necessary for the secondary stations to have their receivers ready for

receiving a broadcast message from the primary station because otherwise the full duplex communications link cannot be realized between both stations" [answer-page 4].

For their part, appellants agree that Yamashita has no teaching or suggestion that in response to an extension request from the primary station, the matched secondary radio station switches off its transmitter and the further matched secondary stations ready their receivers for a message. As for Kapanen, appellants argue that this reference relates to a method and apparatus for detecting hangover periods in a TDMA wireless communication system using discontinuous transmission, wherein hangover periods are detected by the use of flag bits representing certain characteristics of certain transmitted frames, such that a number of frame periods is counted until a certain moment, a beginning of a silence period is detected, and, based on these factors, a determination is made regarding a hangover period. Thus, appellants conclude that Kapanen is "very different than the limitations set forth in claim 1, 6 and 7" [brief-page 6].

It is appellants' position that Kapanen does not suggest that after a communication link has been established an extension

request is sent from the primary radio station to the matched secondary radio station to switch off its transmitter and the further matched secondary stations to ready their receivers for a message.

We agree with appellants. Kapanen teaches switching off the transmitter of a radiotelephone during the time when a user is not speaking, i.e., when there is nothing to transmit, in order to reduce average power consumption and to improve the utilization of the radio frequencies [column 3, lines 22-29]. Thus, it was known to switch off radiotelephones in order to conserve power. However, we find nothing in Kapanen which would have suggested to switch off the transmitter in a matched secondary radio station responsive to an extension request from the primary radio station to the matched secondary station and to further matched secondary stations after the communication link is set up. Thus, while Kapanen may teach generally switching off a radiotelephone when not transmitting anything, that is not a sufficient suggestion to switch off a transmitter in a secondary radio station in Yamashita in response to the primary radio station issuing an extension request.

The examiner says that appellants' argument is not

consistent with the claim limitations because the claims fail to recite that a transmitter is switched off "in response" to an extension request. We disagree. While the term "in response" may not appear in the claims, it is clear from the claim language that first an extension request is issued to the matched secondary station and to further matched secondary stations after setting up a communication link to a matched secondary station which then switches off its transmitter. Thus, it is clear that the transmitter is switched off after the extension request and in response thereto and we interpret the claim language as such in reaching our decision herein. Under such interpretation, it is clear that there is no suggestion in Kapanen that would have led the artisan to modify Yamashita in such a manner as to switch off the transmitter of the matched secondary station upon receiving an extension request from a primary station after a communication link is established between the primary station and the matched secondary station so that the matched secondary station and further matched secondary stations have their receivers ready for receiving a broadcast message from the primary station.

Accordingly, we will not sustain the rejection of claims 1, 2, 6 and 7 under 35 U.S.C. 103.

With regard to claims 3 and 4, the examiner relies on Yamashita, alone, to reject the claims under 35 U.S.C. 103.

Appellants argue that Yamashita does not disclose or suggest that the secondary station to which the full duplex communication has been set up is arranged for transmitting a transfer message to the primary station for transferring the link to another matched secondary station.

The examiner relies on Yamashita's "chief sub-unit" teaching. Specifically, the examiner points to Figure 20 of Yamashita to show a point to multipoint radiotelephone system including a main unit 1 (primary radio station) and plural sub-units 303, 304 and 350 (secondary radio stations). It is said that any of the sub-units may also be called a chief sub-unit. Therefore, when the chief sub-unit transmits a changeover request signal to the main unit (steps S406 and S409 in Figures 29-31) for transferring the communication link to another sub-unit, this is a teaching of arranging a secondary station for transmitting a transfer message to the primary station for transferring the link to another matched secondary station.

However, our review of Yamashita comports with appellants' version of Yamashita's teaching. That is, claim 3 requires that the secondary station must transmit a transfer message (claim 4

requires a "channel skip message" rather than a transfer message) to the primary station in order to transfer the communication link to another matched secondary station. The primary station transmits a release request to the secondary station to which the link has been set up and issues a link establishment request to establish a link with the other matched secondary station. Accordingly, the claims require the secondary station that is already in communication with the primary station, to go through the primary station in order to transfer the link.

In contrast, Yamashita appears to disclose a chief sub-unit, which is already in communication with the main unit, which does not transmit a transfer request to the main unit, only other sub-units that wish to become the chief sub-unit. The examiner points to steps S406 and S409 in Figure 29 of Yamashita. These steps are concerned with transmitting an assignment signal and changing over the chief sub-unit but we find nothing therein which would contradict appellants' position that the chief sub-unit changeover means is used by another sub-unit that is not in communication with the main unit. A sub-unit designates itself as the new chief sub-unit. There is no communication with the primary station in order to transfer the link to another matched secondary unit, or sub-unit, as required, in one form or another,

by claims 3 and 4. This is clear from column 20, lines 35-67, and column 21, lines 1-30, of Yamashita. While there is communication from a secondary, or sub-unit, to the main unit in Yamashita, the instant claims require the communication to be between the matched secondary unit that is already in communication with the main, or primary, unit, and the primary unit. That communication is a transfer message from that matched secondary unit to the primary unit for transferring the link to another secondary unit. The primary unit then transmits a release request to the matched secondary unit to which the link has been set up and the primary unit issues a link establishment request for establishing a link with the other matched secondary unit. There is no such communication between the primary, or main, unit in Yamashita and its chief sub-unit because the "other" sub-unit in Yamashita makes the determination that it wants to become the new chief sub-unit. The present chief sub-unit in Yamashita does not transmit a transfer request to the main unit to transfer the link to the "other" sub-unit.

Accordingly, we will not sustain the rejection of claims 3 and 4 under 35 U.S.C. 103.

The examiner's decision rejecting claims 1-4, 6 and 7 under 35 U.S.C. 103 is reversed.

REVERSED

ERROL A. KRASS Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
ANITA PELLMAN GROSS Administrative Patent Judge	)	

EK/RWK

JACK E. HAKEN
CORPORATE PATENT COUNSEL
U.S. PHILIPS CORPORATION
580 WHITE PLAINS ROAD
TARRYTOWN, NY 10591